



RON CHAPMAN, MD, MPH
Director

State of California - Health and Human Services Agency
California Department of Public Health

Drinking Water and Radiation Laboratory Branch

850 Marina Bay Parkway, Richmond, CA 94804

Phone: (510) 620-2911 Fax: (510) 620-2940



EDMUND G. BROWN JR.
Governor

FINAL Analysis Results Report for Task ID. N12-0192

Analyst: Angela Tan

Analysis Approved By: Shiyamalie Ruberu

Analysis Approval Date: 03/28/2012

Requestor

Name: Steve Hsu

Organization: Radiologic Health Branch

Address: MS 7610, 1500 Capitol Avenue

City: Sacramento

State: CA

Zip Code: 95814-5006 Phone: 916-440-7940

Site and Sample Information

Collector's Name: ACH

Date/Time Collected: 03/09/2012 12:00 Date/Time Received: 03/20/2012 10:30

Site Name: Diablo Canyon NPP

Source Name: DCNPP / DCM

R Number: R 92664

Sample Type: Sediment

<u>Sample ID</u>	<u>Sampling Point</u>	<u>Method</u>	<u>Parameter</u>	<u>Result ± CE</u>	<u>MDA₉₅</u>	<u>Units</u>
N12-0192-001	Sediment	HASL Ga-01-R	Dry Wt./Wet Wt.	0.706 ±		
N12-0192-001	Sediment	HASL Ga-01-R	K-40	9.91 ± 0.230	0.202	pCi/g dry wt

1. Precision criteria for these methods were determined to be acceptable.

2. CE is the counting error at the 95% confidence level as defined in Prescribed Procedures for Measurement of Radioactivity in Drinking Water, EPA-600/4-80-032, August 1980

3. MDA₉₅ is the sample specific minimum detectable activity at the 95% confidence level, which is the LLD₉₅ divided by 2.22, the efficiency and the yield, and may include factors for abundance, decay and ingrowth, depending on the particular radionuclide. LLD₉₅ is defined in section 7020C, Standard Methods for the Examination of Water and Wastewater, American Water Works Association, 21st Ed., 2005, where Sb is the square root of the instrument background count rate.

REQUEST FOR SAMPLE ANALYSIS (Radiochemical)

Sanitation and Radiation Laboratories Branch 850 Marina Bay Parkway, G164, Richmond, CA 94804 510-620-2911	Date Received 3-20-12	Lab No. (Leave Blank) N12-0192
	Date & Time Sampled 3-9-12 1200	Serial Number R 92664
Collector Information Name: Dept./Branch: Address: Telephone No.:	Reporting Information Name: Dept./Branch: Address: Telephone No.:	
Sample Information System Name / Facility: Sampling Point (s): System No.:	Billing Agency <input type="checkbox"/> DWFOB () <input type="checkbox"/> RHB <input type="checkbox"/> RWQCB () <input type="checkbox"/> DTSC <input type="checkbox"/> DWTPB <input type="checkbox"/> FDB <input type="checkbox"/> DWR <input type="checkbox"/> CDFG <input type="checkbox"/> EMB <input type="checkbox"/> Other (Specify) _____	

TYPE OF SAMPLE (Check all applicable boxes)

- ☐ Drinking Water ☐ Groundwater ☐ Surface Water ☐ Wastewater
☐ Raw ☐ Water Treatment Plant (WTP) ☐ Distribution System ☐ Point of Use (POU)
☐ Treated (circle one): Chlorinated / Chloraminated / Chlorine Dioxide / Ozonated / Peroxzone / Fluoridated / Coagulated / pH Adjusted
- ☐ Air Filters Date/Time ☐ Seawater ☐ Sludge (Semi-solid Samples)
 Finishing: _____ ☐ Milk ☐ Soil/Sediment
 Starting: _____ ☐ Wipes ☐ Biota (Type): **Sediment**
 Net (M³) _____ ☐ Radon Canister ☐ Other: _____
☐ Air Charcoal Cartridge

COMMENTS: (Cautions, etc.):

- ☐ Field Treatment: Preservatives added: _____ Iced/Frozen: _____ Other: _____
☐ Field Measurement: _____ mR/hr ☐ Radionuclide(s), if known: _____
☐ Rush/Priority (should be prearranged and have supervisory approval)

ANALYSIS REQUESTED (For questions, please call 510-620-2911)

- | | | |
|---|--|--|
| <input type="checkbox"/> Gross Alpha | <input type="checkbox"/> Gross Beta | <input type="checkbox"/> Gamma Scan |
| <input type="checkbox"/> Total Uranium | <input type="checkbox"/> Total Beta (LSC) | <input type="checkbox"/> NORM (Gamma) |
| <input type="checkbox"/> Total Radium | <input type="checkbox"/> Tritium (³ H) | <input type="checkbox"/> Isotopic Americium / Curium |
| <input type="checkbox"/> Radium-226 | <input type="checkbox"/> Carbon-14 | <input type="checkbox"/> Isotopic Plutonium |
| <input type="checkbox"/> Radium-228 | <input type="checkbox"/> Iodine-131 | <input type="checkbox"/> Isotopic Thorium |
| <input type="checkbox"/> Radon-222 | <input type="checkbox"/> Strontium-89, 90 | <input type="checkbox"/> Isotopic Uranium |
| <input type="checkbox"/> Other (Specify): _____ | <input type="checkbox"/> Nickel-63 | <input type="checkbox"/> Iron-55 |

CHAIN OF CUSTODY

1.	Date _____	Name (Print) _____	_____	Date _____
	Time Custody Received _____	Organization _____	Signature _____	Time Custody Released _____
2.	Date _____	Name (Print) _____	_____	Date _____
	Time Custody Received _____	Organization _____	Signature _____	Time Custody Released _____
3.	Date _____	Name (Print) _____	_____	Date _____
	Time Custody Received _____	Organization _____	Signature _____	Time Custody Released _____

LABORATORY REMARKS (Leave Blank)

- A. Condition at Time of Receipt:**
☐ Acceptable ☐ Broken Container ☐ Leaked in Transit ☐ Improper Container
☐ Holding Time Exceeded ☐ Sample Not Cooled ☐ Insufficient Sample
- B. Preservatives/Carriers:**
☐ Added While Sampling ☐ Added in Laboratory ☐ Not Added ☐ Not Applicable